AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A method, comprising:

storing color components of an image of a first color component type in a planar format;

storing color components of the image of a second color component type and a third color component type in a packed format, such that the color components of the image are stored in a mixed format of planar format and packed format; and

motion compensating the color components of the image in the mixed format of planar format and packed format

2. (Previously Presented) The method of claim 1,

wherein the storing the color components of the image in the in the planar format further comprises:

storing luminance components (Y) of the image in a planar array, and

wherein the storing the color components of the image in the packed format further comprises:

storing chrominance components (UV) of the image in a packed array.

3. (Cancelled)

4. (Previously Presented) The method of claim 1, wherein at least one of the color components of the image are sub-sampled in a dimension of another color component of the image as one of a 4:2:0 space, a 4:2:2 space, and a 4:1:1 space.

5. (Previously Presented) A method, comprising:

receiving an image consisting of a plurality of color components, wherein the plurality of color components are received in a format as one of planar format and packed format;

converting the plurality of color components into a mixed format of planar format and packed format, such that color components of a first color component type are stored in a planar format and color components of a second color component type and a third color component type are stored in a packed format; and

motion compensating the plurality of color components of the image in the mixed format of planar format and packed format.

6. (Previously Presented) The method of claim 5, wherein converting the plurality of color components comprises:

storing luminance components (Y) of the image in a planar array, and

storing chrominance components (UV) of the image in a packed array.

7-13 (Cancelled)

14. (Previously Presented) A computer-readable medium having stored thereon a set of instructions, the set of instruction, which when executed by a processor, cause the processor to perform a method comprising:

receiving an image consisting of a plurality of color components, wherein the plurality of color components are received in a format as one of planar format and packed format;

converting the plurality of color components into a mixed format of planar format and packed format, such that color components of a first color component type are stored in a planar format and color components of a second color component type and a third color component type are stored in a packed format; and

motion compensating the plurality of color components of the image in the mixed format of planar format and packed format.

15. (Previously Presented) The computer-readable medium of claim 14, wherein converting the plurality of color components comprises:

storing luminance components (Y) of the image in a planar array, and

storing chrominance components (UV) of the image in a packed array.

16. (Cancelled)

17. (Previously Presented) A computer-readable medium having stored thereon a set of instructions, the set of instruction, which when executed by a processor, cause the processor to perform a method comprising:

storing color components of an image of a first color component type in a planar format;

storing color components of a second color component type and a third color component type in a packed format such that the color components of the image are stored in a mixed format of the planar format and the packed format; and

motion compensating the color components of the image in the mixed format of planar format and packed format.

18. (Cancelled)

19. (Previously Presented) The computer-readable medium of claim 17, wherein at least one of the plurality of color components of the image are sub-sampled in a dimension of another color component of the image as one of a 4:2:0 space, a 4:2:2 space, and a 4:1:1 space.

20-22 (Cancelled)

23. (Withdrawn) A method comprising:

receiving a quantized block of an image;

performing inverse quantization on the quantized block to generate a frequency spectrum for the quantized block;

performing inverse discrete cosine transformation of the quantized block using the frequency spectrum to generate a decoded block;

repeating the receiving, decoding, performing and performing for a plurality of encoded blocks, such that a plurality of decoded blocks are formed;

motion compensating the plurality of blocks as a group thereby generating a plurality of motion compensated (MC) blocks and;

repeating the receiving, decoding, performing, performing, repeating and motion compensating for each quanitized block of the image.

24. (Withdrawn) The method of claim 23, where the motion compensating of the plurality of blocks further comprises:

using as the plurality of blocks four blocks, such that four MC blocks are generated as the plurality of MC blocks; and

writing pixel data of the four MC blocks as a group and in a sequential manner to a frame buffer, such that prior to being burst written to the frame buffer, the pixel data is temporarily held in an entry of a write-combining (WC) buffer, thereby eliminating partial writes from the WC buffer.

25. (Withdrawn) The method of claim 23, wherein the decoded blocks are represented in a YUV color space, planar storage format and the motion compensating further comprises:

storing luminance components (Y) of the decoded blocks in a planar array; and

storing chrominance components (UV) of the decoded blocks in a packed array, such that the decoded blocks are converted into a mixed storage format of planar format and packed format.

26. (Withdrawn) A computer-readable medium having stored thereon a set of instructions, the set of instruction, which when executed by a processor, cause the processor to perform a method comprising:

receiving a quantized block of an image;

performing inverse quantization on the quantized block to generate a frequency spectrum for the quantized block;

performing inverse discrete cosine transformation of the quantized block using the frequency spectrum to generate a decoded block;

repeating the receiving, decoding, performing and performing for a plurality of encoded blocks, such that a plurality of decoded blocks are formed;

motion compensating the plurality of blocks as a group thereby generating a plurality of motion compensated (MC) blocks and;

repeating the receiving, decoding, performing, performing, repeating and motion compensating for each quanitized block of the image.

27. (Withdrawn) The computer-readable medium of claim 18, where the motion compensating of the plurality of blocks further comprises:

using as the plurality of blocks four blocks, such that four MC blocks are generated as the plurality of MC blocks; and

writing pixel data of the four MC blocks as a group and in a sequential manner to a frame buffer, such that prior to being burst written to the frame buffer, the pixel data is temporarily held in an entry of a write-combining (WC) buffer, thereby eliminating partial writes from the WC buffer.

28. (Withdrawn) The computer-readable medium of claim 26, wherein the decoded blocks are represented in a YUV color space, planar storage format and the motion compensating further comprises:

storing luminance components (Y) of the decoded blocks in a planar array; and

storing chrominance components (UV) of the decoded blocks in a packed array, such that the decoded blocks are converted into a mixed storage format of planar format and packed format.

29. (Previously Presented) A method, comprising:

receiving a decoded block of color components of an image in a mixed format of a motion packed format and a planar format;

motion compensating the decoded block of color components in the mixed format according to a motion vector and a reference frame stored in the mixed format of the packed format and the planar format;

storing a reference frame from motion compensation of the decoded block in the mixed format of the planar format and packed format; and

repeating the receiving, the converting and the storing for each decoded block of color components of the image.

30. (Withdrawn) The method of claim 29, further comprises:

using as the plurality of blocks of color components four blocks of color components; and

writing pixel data of the four blocks as a group and in a sequential manner to a frame buffer, such that prior to being burst written to the frame buffer, the pixel data is temporarily held in an entry of a write-combining (WC) buffer, thereby eliminating partial writes from the WC buffer.

31. (Previously Presented) The method of claim 29, further comprising:

converting the block of color components into the planar format.

32. (Previously Presented) The method of claim 29, further comprising:

converting the motion compensated blocks of color components into a red, blue, green format to form a decoded image.

33. (Previously Presented) A computer-readable medium having stored thereon a set of instructions, the set of instruction, which when executed by a processor, cause the processor to perform a method comprising:

receiving a decoded block of color components of an image in a mixed format of a packed format and a planar format;

motion compensating the decoded block of color components in the mixed format according to a motion vector and a reference frame stored in the mixed format of the packed format and the planar format;

storing a reference frame from motion compensation of the decoded block in the mixed format of the planar format and the packed format; and

repeating the receiving, the converting and the storing for each block of color components of the image.

34. (Withdrawn) The computer-readable medium of claim 33, further comprises:

using as the plurality of blocks of color components four blocks of color components; and

writing pixel data of the four blocks as a group and in a sequential manner to a frame buffer, such that prior to being burst written to the frame buffer, the pixel data is temporarily held in an entry of a write-combining (WC) buffer, thereby eliminating partial writes from the WC buffer.

35. (Previously Presented) The computer-readable medium of claim 33, further comprising:

converting the block of color components into the planar format.

36. (Previously Presented) The computer-readable medium of claim 33, further comprising:

converting the motion compensated blocks of color components into a red, blue, green format to form a decoded image.

37. (Previously Presented) A method, comprising:

receiving a block of a color components of an image in a planar format;

decoding the received block to form a decoded block in the planar format;

converting the decoded block of color components into a mixed format of the packed format and the planar format;

motion compensating the decoded block of color components in the mixed format according to a vector and a reference frame stored in the mixed format of the packed format and the planar format; and

repeating the receiving, the decoding, the converting and the motion compensating for each block of color components of the image.

38. (Withdrawn) The method of claim 37, further comprises:

using as the plurality of blocks of color components four blocks of color components; and

writing pixel data of the four blocks as a group and in a sequential manner to a frame buffer, such that prior to being burst written to the frame buffer, the pixel data is temporarily held in an entry of a write-combining (WC) buffer, thereby eliminating partial writes from the WC buffer.

39. (Previously Presented) The method of claim 37, wherein motion compensating comprises;

storing a reference frame from motion compensation of the decoded block in the mixed format of the planar format and packed format.

40. (Previously Presented) The method of claim 37, further comprising:

converting the motion compensated blocks of color components into a red, blue, green format to form a decoded image.

41. (Previously Presented) A computer-readable medium having stored thereon a set of instructions, the set of instruction, which when executed by a processor, cause the processor to perform a method comprising:

receiving a block of a color components of an image in a planar format;

converting the decoded block of color components into a mixed format of the packed format and the planar format;

motion compensating the decoded block of color components in the mixed format according to a vector and a reference frame stored in the mixed format of the packed format and the planar format; and

repeating the receiving, the decoding, the converting and the motion compensating for each block of color components of the image.

42. (Withdrawn) The computer-readable medium of claim 41, further comprises:

using as the plurality of blocks of color components four blocks of color components; and

writing pixel data of the four blocks as a group and in a sequential manner to a frame buffer, such that prior to being burst written to the frame buffer, the pixel data is temporarily held in an entry of a write-combining (WC) buffer, thereby eliminating partial writes from the WC buffer.

43. (Previously Presented) The computer-readable medium of claim 41, wherein motion compensating comprises;

storing a reference frame from motion compensation of the decoded block in the mixed format of the planar format and packed format.

44. (Previously Presented) The computer-readable medium of claim 41, further comprising:

converting the motion compensated blocks of color components into a red, blue, green format to form a decoded image.

45. (Previously Presented) The method of claim 1, wherein the first color component type is a luminance color component type (Y), the second color component type is a chrominance color component type (U) and the third color component type is a chrominance color component type (V).

46. (Previously Presented) The method of claim 5, wherein the first color component type is a luminance color component type (Y), the second color component type is a chrominance color component type (U) and the third color component type is a chrominance color component type (V).

47 (Previously Presented) The computer-readable medium of claim 14, wherein the first color component type is a luminance color component type (Y), the second color component type is a chrominance color component type (U) and the third color component type is a chrominance color component type (V).

48. (Previously Presented) The computer-readable medium of claim 17, wherein the first color component type is a luminance color component type (Y), the second color component type is a chrominance color component type (U) and the third color component type is a chrominance color component type (V).